EXHIBIT 3a

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UNITED STATES DISTRICT COURT

FOR THE EASTERN DISTRICT OF TEXAS

IMPLICIT, LLC, )

Plaintiff,)

vs. )CASE NO. 6:16-CV-00080-JRG

TREND MICRO, INC., )

Defendant.)
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DEPOSITION OF DANIEL DECASPER

Palo Alto, California

Wednesday, May 17, 2017

Reported by: Ashley Soevyn, CSR No. 12019

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10
    look at them, and then we'll have copies made and we
2
    can mark them as exhibits right at the end.
    let's just go off the record for a minute.
                (Off the record.)
5
    BY MS. ACHARYA:
6
               So, back on the record. Mr. DeCasper,
7
    looking at the subpoena that we marked as Exhibit 1,
8
    you'll see some of the topics that were listed
9
    there. Did the router plug-ins references that are
10
    attached to the subpoena relate to a single project
11
    that you undertook?
12
               That, I think, depends on how you would
13
    define that, right. So the work we've done on this
14
    sort of started in -- trying to get my dates
15
    right -- in '96. And one of the first things that
16
    came out of it was the router plug-ins, on paper,
17
    and then we continued on that and sort of added the
18
    active networking part of it.
19
               And so it sounds like you could sort of
20
    think of these as one project, but you could also
21
    sort of think of it as two projects, right. Because
22
    they produce individual deliverables, so we could
23
    argue they have value individually. But, so the
24
    second one was leveraging some of the work that was
25
    done on the first.
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22

- but they did reviews, et cetera, but they haven't
- ² really written.
- 3 Q And you mentioned that it was written in
- 4 '97, '98. Do you recall more specifically when this
- 5 paper may have been written?
- 6 A So you consider the work backwards,
- 7 right. So it was in ACM SIGCOMM, S-I-G-C-O-M-M, in
- 9 '98, and they were around in the fall of '98. And
- 9 so I think you have to have your submissions in, if
- 10 I recall correctly, sometime in the spring. So by
- then it's completely buttoned-up and ready to go.
- 12 So I don't recall at least sitting there at that
- 13 time and writing it. It was just from working
- 14 backwards, right. It must have been in, like, go
- 15 between, I would say, it usually takes a few months
- in something like this, right. So it must have been
- in like late '97, early '98.
- Q Okay. And do you recall where this was
- 19 published?
- 20 A Yes. So the way this works is you submit
- this -- the papers to basically the conference. So
- in this case SIGCOMM. And then they review. And if
- they accept it, then they create what they call a
- proceedings off the conference, which is a --
- actually, I have that. I didn't bring it because

23 it's the same paper, right. It just has this paper 2 and all the other papers that were in the conference 3 that year, right. And so that's how it gets -- it 4 gets them published. 5 But often times -- and I don't recall in 6 this case if we had this on the website. Often 7 times, people -- you're under no obligation to wait 8 or anything like that, right. Typically, you don't want to submit it to many -- to multiple 10 conferences. But it's not like it's confidential or 11 anything that before. 12 You typically don't want wait to do what 13 exactly? 14 I meant, so just because you submit it --15 so it's -- I really don't recall, but it's possible we had this up, for example, my personal website,

19 Q Okay.

right.

17

18

20 A Because they don't -- I don't know how

Before it came out as part of the

- 21 they do it these days, but at least back then they
- 22 didn't really care.
- 23 Q And what was the -- is it SIGCOMM
- 24 conference?
- 25 A Yeah, it's here on the --

proceedings of the conference.

```
26
               And how long do you typically present
1
2
    for?
3
               It's got to be a thousand. At least a
          Α
    thousand.
               A thousand people?
6
                       I just think I kind of pictured
               Yeah.
7
    the room, right, and then I do the math, and how
8
    many you can sit in a row, and then I kind of try to
9
    recall how that looked like. It's a big --
10
               Okay. And do you recall roughly how long
11
    you presented on this paper for?
12
                I think the slots are -- it's not that
13
    much. I would say like 20 to 30 minutes, something
14
    like that.
15
               Would people have had the opportunity to
16
    read the paper prior to the presentation?
               It's a good question. I think so. So
17
          A
18
    certainly the proceedings are -- they -- when you
19
    show up, they give it to you as part of your
20
    package. But I don't think they send it out before
21
    you get there. So, I mean, if you wanted to read it
22
    before then, again, you would have to find it
23
    through a different source.
24
               Okay. And in terms of this router
          Q
    plug-ins paper that's Exhibit 2 here today, can you
25
```

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81
    this, these are highlighted. That's why I think the
2
    font on these guys is bigger, right, because those
    were the fields that we considered for that six
    tuple.
5
                MS. ACHARYA: I have an article here
6
    titled, DAN, D-A-N, Distributed Code Caching for
7
    Active Networks, which I'm going to hand to the
8
    court reporter to mark as Exhibit 6.
9
            (Exhibit 6 marked for identification.)
10
                THE REPORTER: Exhibit 6.
                THE WITNESS: Thank you.
11
    BY MS. ACHARYA:
12
13
                And, Mr. Decasper, if you can take a
14
    minute to look through this article, and tell me
15
    whether you've seen this document before.
16
          Α
                Yes.
                      Yup.
17
                What is this document?
18
          A
               This is a paper that we wrote for
19
    InfoComm, which is another networking conference.
20
    So, similar to SIGCOMM, but not quite as selective.
21
    And -- yeah.
22
                Were you the author of this article?
23
          Α
                Yes.
24
                Do you recall when it was written?
          0
25
                      So InfoComm was in -- so this is
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82

- 1 1998 on. InfoComm was in April of 1998, in
- beautiful San Francisco. I wasn't living here then,
- but I got to San Francisco. Yeah, and so this was
- in the proceedings of the conference, just like the
- route, Exhibit 2, was in the proceedings of SIGCOMM.
- 6 Q So the conference was in April 1998?
- 7 A Uh-huh.
- 9 been written?
- 10 A So, similarly, it would have been
- 11 probably sort of in the '97, '98 time frame. Again,
- so this -- let me try to remember InfoComm.
- 13 Probably similar to SIGCOMM. So if the conference
- was in April, then they probably -- would have
- probably wanted the paper like late in '97, right.
- And so to have it ready to go, it would have been --
- the work would have been done in that year, if not
- 18 before. Right.
- 19 So sometimes I would still have some work
- sitting around, and then you sort of wait for the
- 21 right -- you would have enough, or you kind of wait
- for the right conference to go after. Right. And
- so, for example, so I don't recall this particular
- 24 case, but if you just, for example, miss -- if you
- think this is a good fit for InfoComm, but you just

```
83
    miss the deadline, right, you might wait a year to
2
    then get it out in the next one.
3
                Do you recall if this article was
    published elsewhere prior to the conference?
                I don't, but, I mean, that means -- so I
6
    think if it was published, it would have been,
    again, published as a tech report. I mean, that's
8
    certainly something you could go find out, because
9
    these are all on the record.
10
                Did you present on this paper at the
    conference?
11
12
                Uh-huh.
               Do you recall -- is that a yes?
13
14
          Α
                Yes.
15
                Do you recall how many people were in the
    audience?
16
17
               So InfoComm isn't the same track
          A
18
    conference, unlike SIGCOMM. But it's still a --
19
    it's the second most significant -- or at least was
20
    the second most significant networking conference.
21
                So, I mean, it's got to have been at
22
    least, I would say, you know, at least 100. But, so
23
    unlike SIGCOMM, I don't quite recall the -- which
24
    hotel it was in. So I'm a little fuzzy on exactly
25
    the details of that, but that was the venue.
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84
          0
               Do you recall if the paper was peer
    reviewed?
          A
               Yup, definitely.
4
                MS. ACHARYA: Okay. I have another
    article here titled, ANN, A-N-N, A Scalable
6
    High-performance Active Network Node, which I'm
7
    going to give to the court reporter to mark as
8
    Exhibit 7.
            (Exhibit 7 marked for identification.)
10
                THE WITNESS: Thank you.
11
    BY MS. ACHARYA:
                Mr. Decasper, if you could take a minute
12
    to look at this document, and let me know if you've
13
14
    seen this before.
15
                Yeah, so this was from the project
          Α
    website for the -- for the ANN project.
17
                And do you recall -- let me back up.
           O
                                                       Was
18
    this a website that the public could access?
19
           Α
                Yes.
           Q
                Do you recall when it was publicly
21
    available?
22
           Α
                So this -- so this was basically the
23
    project that we got funded from DARPA. Right. And
24
    this was the one where I said earlier I've worked on
25
    in 1999, when I was in St. Louis. And so, I mean,
```

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95
    packet.
2
               MS. ACHARYA: Objection.
                                          Form.
3
                It has to be in Exhibit 2.
    BY MR. DINOVO:
5
               Okay. And so in Exhibit 2, explain to me
          0
6
    what you're talking about. What had to be done in
7
    Exhibit 2 about the plug-in being present before the
8
    packet arrived?
9
               What had to be -- say that again.
10
          0
               I think you were saying Exhibit 2 had
11
    particular characteristics associated with when the
12
    plug-in had to be loaded into the kernel.
13
               Right.
          A
14
          O
               Okay. So explain to me why that was.
15
               MS. ACHARYA: Objection. Form.
16
               THE WITNESS: For the system to work,
17
    right, the plug-in needs to be present by the time
18
    the packet arrives. Right. That's really the only
19
    restriction. That means you can start up the system
20
    today, and install the plug-in a week from now, as
21
    long as -- it's just that the traffic that will show
22
    up between now and a week from now, the plug-in
23
    wouldn't operate on.
24
    BY MR. DINOVO:
25
               Right. But you were differentiating, I
          Q
```

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96
    think, Exhibit 2 from some future generation of your
2
    work.
3
               Right. So, in Exhibit 5, 4, 3, I guess
4
    all of them maybe, 6, and then the stuff I brought
    along, so 8 and 9, certainly 7, the code can be --
6
    is automatically loaded at the time the packet shows
7
    up on the system.
8
               Automatically loaded from where?
               From a code server.
10
               And the difference is that it had to be
11
    manually loaded with Exhibit 2?
12
               Correct.
13
                Now, you testified earlier that you could
14
    look at other fields in a packet, besides just the
15
    IP layer, right?
16
          Α
                Yes.
17
                But that's very different, is it not, Mr.
18
    Decasper, from processing in different layers,
19
    processing packets at different layers?
20
                MS. ACHARYA: Objection. Form.
21
                THE WITNESS: I guess I don't see the
22
    difference.
23
    BY MR. DINOVO:
24
                Well, you don't understand the difference
          0
25
    between packet processing and packet classification?
```